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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/821,172	03/29/2001	Darin Wayne Higgins	108344.00021	4025

7590 10/28/2002  
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EXAMINER

AMINI, JAVID A

ART UNIT	PAPER NUMBER
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2672

DATE MAILED: 10/28/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

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# Office Action Summary

Application No.

09/821,172

Applicant(s)

HIGGINS ET AL.

Examiner

Javid A Amini

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☒ Claim(s) 1-20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-20 rejected under 35 U.S.C. 102(a) as being anticipated by Eppler us patent 6,084,989.

**1. Claim 1,**

As per claim 1, line 5, “a map display”, Eppler discloses in (col. 3, lines 58-62) that the ground equipment 12 (fig. 1) comprises a computer system 16 that implements an image patch extraction algorithm 17, and includes an interactive image display 18 that an operator 19 may use to process images, and includes the present landmark position system 20.

As per claim 1, line 6, “a map processing platform in communication with the map display”, this step is inherent because map processing platform (called VGA controllers) is consisting of: CPU, memory, operating system, motherboard and map display (called monitors) is consisting of a motherboard, CPU, memory, integrated circuits, board level programming and etc., this configuration is part of the integration of a simple computer. And the platform is either located remotely or locally. The main function of hardware and software is communication.

As per claim 1, line 7, “a storage platform coupled to the map processing platform”, this step is inherent because every computer has memory chips and space for storage area that can save the

operating system and graphic applications on storage area (called hard drive, tape backup and compact disk).

As per claim 1, line 8, “a user interaction device coupled to the map processing platform”, this step is also inherent and obvious because in order a system be able to store, manipulate, calculate and display information must have a user interaction device for example: keyboard, mouse, touchable pen, and etc.

**2. Claim 2,**

As per claim 2, “the map display is enabled to display a first map and a second map”, the applicant used the term map display that means a monitor, display that connected to a computer with operating system of Microsoft windows (can be called service provider) and number of windows that carries (cartographic drawing, map, pictures, text and moving object) can be open the same time and can be view with one monitor.

**3. Claim 3,**

As per claim 3, “the map display is coupled to a graphics adapter”, this step is inherent because map processing platform (called VGA controllers) is consisting of: CPU, memory, operating system, motherboard and map display (called monitors) is consisting of a motherboard, CPU, memory, integrated circuits, board level programming and etc., this configuration is part of the integration of a simple computer. And communication is main function of these hardware and software.

**4. Claim 4,**

As per claim 4, “the processing platform is a microprocessor”, the same as rejection of claim 1, line 6 will apply in the claim 4 rejection.

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**5. Claim 5,**

As per claim 5, “the map processing platform is an application service provider”, this step as explained in claim 1 line 6 and claim 2 is inherent because map-processing platform is providing all related service to an application.

**6. Claim 6,**

As per claim 6, “the map processing platform is located remotely from the map display”, the step is inherent because for disaster recovery situation the processing platform can be located remotely as a web server or database server or as an application server.

**7. Claim 7,**

As per claim 7, “the storage platform comprises cached memory”, the step is inherent because in order to accomplish faster transaction between storage platforms and display since last decade the chipmakers designed cached memory inside CPU and storage systems.

**8. Claim 8,**

As per claim 8, “the storage platform comprises system memory”, the step is inherent and the rejection of claim 1 and 7 will apply to rejection of claim 8.

**9. Claim 9,**

As per claim 9, “the storage platform comprises non-cached volatile storage”, the step is inherent because memory chips are type of storage in which information cannot be retained without continuous power application.

**10. Claim 10,**

As per claim 10, “the user interaction device comprises a mouse”, see reject of claim 1 line 8.

**11. Claim 11,**

As per claim 11, “the map processing platform and the map display are coupled via a network”, the step is inherent see rejection of claim 6.

**12. Claim 12,**

As per claim 12, “the network is the internet”, the step is inherent see rejection of claim 6.

**13. Claim 13,**

As per claim 13, “the storage platform is associated with the map processing platform via a network”, the step is inherent, see rejection of claim 6.

**14. Claim 14,**

As per claim 14, “the network is the internet”, the step is inherent see rejection of claim 6.

**15. Claim 15,**

As per claim 15, “the storage platform maintains code that enables the automatic manipulation of a second map when a first map is manipulated by: determining a boundary of a geographic region of a first map; converting the boundary of the geographic region of the first map into a corresponding boundary of a second map; and is configuring the boundary of the second map for display”, the step is inherent because the codes for determining a boundary; converting the boundary; and configuring the boundary are executed where the storage platform is located.

**16. Claim 16,**

As per claim 16, “the storage platform maintains code that enables the automatic manipulation of a second map when a first map is manipulated by: determining a boundary of a geographic region of a first map; converting the boundary of the geographic region of the first map into a corresponding boundary of a second map; configuring the boundary of the second map for display; receiving a selection of a first region of a first map; and receiving an interaction for

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multiple map manipulation by providing a user interaction with a map”, the step is inherent because the codes for determining a boundary; converting the boundary; receiving a selection; receiving an interaction; and configuring the boundary are executed where the storage platform is located.

**17. Claim 17,**

As per claim 17, “determining a boundary of a geographic region of a first map; converting the boundary of the geographic region of the first map into a corresponding boundary of a second map; and configuring the boundary of the second map for display”, Eppler discloses in Fig. 2 that a block diagram illustrating details of the landmark position system 20 along with other portions of the GOES system 10 with which it interacts. The present processing method 40 is also illustrated in Fig. 2. Candidate landmarks are selected using landmark selection criteria 26 together with softcopy and hardcopy (first map) databases 28 such as a Digital Chart of the World (DCW) and ARC Digitized Raster Graphics (ADRG) maps derived from Joint Operation Graphic (JOG) (determining and converting the boundary of the geographic regions) hardcopy maps, and user-digitized hardcopy maps (second map) in GIF format digitized using a digitizer 29. The DCW is a worldwide, seamless, thematic, vector map derived from hardcopy maps at a scale of 1:1,000,000. Data comprising the candidate landmarks, DCW vector map, ADRG JOG map, or user-digitized hardcopy map are input to a Common Mapping Toolkit (CMTK) geographic information system 27 developed by the Air Force modified for use with the present invention. The modified CMTK geographic information system 27 is used to generate a list of coordinates (configuring the boundary of the second map) for landmark boundary vertices (.phi., .lambda., H) which are input to the landmark position system 20.

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**18. Claim 18,**

As per claim 18, “detecting an annotation entry on the first map; associating the annotation entry with a set of first map coordinates; associating the set of the first map coordinates with a set of second map coordinates; and enabling the display of the annotation entry on the second map”, Eppler discloses (col. 7, line 24-26), that the edge matching algorithm (detecting by correlating) achieves location accuracy by matching a large number of edge points in the image to the projected landmark perimeter. The edges are detected using a Laplacian-of-Gaussian algorithm. Also Eppler discloses in (col. 2, lines 7-13) the coordinates of landmarks in the digitized image with subpixel accuracy. The system and method use landmarks in symbolic form, and in particular, perimeters of lakes and islands, derived from precise cartographic source materials. A large number of landmarks in symbolic form are stored in a database. Eppler associates the set of the softcopy map from data base 27 (coordinates, boundary, vertices) with set of image data (second map) coordinates, boundary, vertices and area 22 in Fig. 2 that enabling the display of parameters on the final image.

**19. Claim 19,**

As per claim 19, “associating the set of first map coordinates locates the annotation entry within the second map such that the set of second map coordinates correspond geographically to the location of the annotation as defined by the set of first map coordinates”, Eppler teaches in (col. 2, lines 19-26) a list of coordinates for landmark boundary vertices of the corresponding landmark stored in the database is processed through a mathematical model (first map) of the imaging system to generate absolute coordinates of the boundary pixels of the landmark. The



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absolute coordinates of the boundary pixels of the landmark are up sampled (magnified) and rasterized to produce a landmark mask (second map).

**20. Claim 20,**

As per claim 20, “detecting an annotation entry on the first map; associating the annotation entry with a set of first map coordinates; associating the set of the first map coordinates with a set of second map coordinates; and enabling the display of the annotation entry on the second map”, Eppler teaches in (col. 2, lines 19-26) a list of coordinates for landmark boundary vertices of the corresponding landmark stored in the database is processed through a mathematical model (first map) of the imaging system to generate absolute coordinates of the boundary pixels of the landmark. The absolute coordinates of the boundary pixels of the landmark are up sampled (magnified) and rasterized to produce a landmark mask (second map). Also see rejection of claim 17.

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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javid A Amini whose telephone number is 703-605-4248. The examiner can normally be reached on 8-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 703-305-4713. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-8705 for regular communications and 703-746-8705 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

Javid Amini  
October 22, 2002



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